

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings of claims in the Application.

Listing of Claims:

Claim 1 (Currently amended): A circuit system for data transmission between LPC devices, comprising:

a first LPC bus, connected to a first LPC device;

a second LPC bus, connected to a second LPC device; and,

a an LPC host controller, including an address register for storing a target address, said LPC host controller being operable to initiate a first bus access cycle on said first LPC bus and a second bus access cycle on said second LPC bus, said LPC host controller being further operable to initiate said second access cycle upon said target address matching an address on said second LPC bus, said LPC host controller being configured to terminate said first bus access cycle only after said second bus access cycle is terminated ~~able to drive said first LPC device through said first LPC bus and said second LPC device through said second LPC bus.~~

Claim 2 (Cancelled).

Claim 3 (Currently amended): The circuit system as recited in claim 1, wherein said first LPC device is a master LPC device and said second LPC device is a slave LPC device.

Claim 4 (Cancelled).

Claim 5 (Original): The circuit system as recited in claim 1, wherein said first LPC bus and said second LPC bus are connected to a plurality of LPC devices, respectively.

Claim 6 (Currently amended): A method for data transmission between LPC devices, comprising the steps of:

providing an LPC host controller with an address register for storing a target address;

~~starting~~ initiating a first bus access cycle ~~through~~ on a first LPC bus by said LPC host controller, ~~wherein a first LPC device sends a request to have a transaction with a second LPC device, and;~~

transmitting over said first LPC bus by a first LPC device coupled thereto a request to said LPC host controller for a transaction with a second LPC device coupled to a second LPC bus;

storing an address of a data location on said second LPC device in said address register as said target address;

inserting a plurality of wait states in said first bus access cycle after said request is received by said LPC host controller; and

~~starting~~ initiating a second bus access cycle ~~through~~ on a said second LPC bus by said LPC host controller, ~~wherein said LPC host controller has a transaction with said second LPC device according to said request from said first LPC device; and,~~

accessing by said LPC host controller said data location over said second LPC bus.

Claim 7 (Currently amended): The method as recited in claim 6 including the steps of; ~~wherein said request is a request for reading data from said second LPC device~~

setting said transaction to be a data read from said second LPC device;

transferring said data from said second LPC device to said LPC host controller over said second LPC bus;

terminating said bus access cycle on said second LPC bus;

terminating said wait state inserting step after said bus access cycle on said second LPC bus is terminated;

transferring said data from said LPC host controller to said first LPC device over said first LPC bus; and,
terminating said bus access cycle on said first LPC bus after said LPC host controller transfers said data to said first LPC device.

Claim 8 (Cancelled).

Claim 9 (Currently amended): The method as recited in claim 6 further including the steps of; ~~wherein said request is a request for writing data into said second LPC device~~

setting said transaction to be a data write to said second LPC device;
transferring said data from said first LPC device to said LPC host controller over said first LPC bus;
transferring said data from said LPC host controller to said first LPC device over said second LPC bus; and,
terminating said bus access cycle on said second LPC bus;
terminating said wait state inserting step after said bus access cycle on said second LPC bus is terminated;
terminating said bus access cycle on said first LPC bus after said LPC host controller transfers said data to said second LPC device.

Claim 10 (Cancelled).

Claim 11 (Currently amended): A circuit system for data transmission between LPC devices, comprising:

a an LPC bus;

a master LPC device connected to said LPC bus, said master LPC device including an address register for storing a target address;

at least one slave LPC ~~devices~~ device connected to the said LPC bus;

and

a an LPC host controller, including an address register for storing said target address, said LPC host controller being operable to initiate a data transfer cycle on ~~able to drive said master LPC device and said slave LPC devices through~~ said LPC bus, said data transfer cycle including both a first bus access cycle for LPC bus access by said master LPC device and by a second bus access cycle for LPC bus access by one of said at least one slave LPC device;

~~wherein each of said LPC host controller and said master LPC device comprises an address register.~~

Claim 12 (Currently amended): The circuit system as recited in claim 11, wherein each of said at least one slave LPC ~~device~~ devices further comprises includes an

address register for storing said target address.

Claim 13 (Currently amended): A method for data transmission between LPC devices, comprising the steps of:

providing an LPC master device with an address register for storing a target address;

~~starting~~ initiating a first bus access cycle ~~through~~ on an LPC bus by ~~an~~ said LPC host controller, ~~wherein said LPC host controller has a transaction with a master LPC device;~~

transmitting a request ~~signal~~ for a transaction over said LPC bus from said master LPC device ~~through said LPC bus~~ to said LPC host controller, said ~~for~~ ~~having a transaction~~ specifying a transfer of first data between said master LPC device and a ~~with at least one slave LPC device~~ devices; and

transferring second data between said LPC host controller and master LPC device during said first bus access cycle;

storing an address of a data location on said slave LPC device in said address register of said master LPC device as said target address;

~~starting~~ initiating a second bus access cycle ~~through~~ on said LPC bus by said LPC host controller, ~~wherein~~

transferring said first data between said LPC host controller ~~has a~~
~~transaction with said slave LPC device~~ devices according to said request from said
~~master LPC device~~ during said second bus access cycle.

Claim 14 (Currently amended): The method as recited in claim 13 further
including the steps of; ~~wherein said request is a request for reading data from said~~
~~slave LPC devices~~

setting said transaction to be a data read from said slave LPC device; and,
setting said second data to an arbitrary data value.

Claim 15 (Cancelled).

Claim 16 (Currently amended): The method as recited in claim ~~14~~ 15, further
comprising ~~a step~~ the steps of:

providing said LPC host controller with an address register for storing said
target address; and,

~~recording~~ storing said address of said data location in ~~an~~ said address
register ~~installed in~~ of said LPC host controller after said LPC host controller has
received said ~~reading~~ transaction request from said master LPC device ~~so as to~~
~~identify said data.~~

Claim 17 (Currently amended): The method as recited in claim 16, further comprising the steps of:

~~responding said reading request from said LPC host controller and transmitting~~ transferring said first data from said slave LPC device devices to said LPC host controller; and

monitoring said LPC bus for data ~~transmitted~~ transferred from said slave LPC device; ~~and, through said LPC bus, then said master LPC device can identify and obtain said data recording to said address recorded in said address register installed in said master LPC device~~

accepting at said master LPC device said data transferred from said at least one slave LPC device as said first data if a source address thereof is equivalent to said target address stored in said address register of said master LPC device.

Claim 18 (Currently amended): The method as recited in claim 13 further including the steps of; ~~wherein said request is a request for writing data into said slave LPC device~~

setting said transaction to be a data write to said slave LPC device; and,
setting said second data to equal said first data.